AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, including listings, of claims in the application.

Listing of Claims

Claims 1-30 (canceled)

Claim 31 (new). A method of manufacture of an anti-paratopic antibody comprising the steps of:

(i) selecting from a pool of antibodies prepared from a plurality of humans, a prototypic set wherein members of the prototypic set are antibodies which bind HIV;

(ii) subdividing the prototypic set selected in step (i) into antibody classes IgG, IgA, IgM, IgD and IgE;

(iii) screening the antibody classes from step (ii) to select one or more classes which bind at least one of the HIV proteins selected from gp120, gp41, p24, p18, p55 and gp160;

(iv) introducing one or more of the antibody classes selected in step (iii) into a host of a different species from humans to produce antibodies having characteristics which are anti-paratopic with respect to said introduced antibody and which are a synthetic replicate of the specific antigen or group of antigens used in step (iii); and

(v) selecting, isolating and purifying the anti-paratopic antibodies produced in step (iv) which bind antibodies that bind HIV.

Claim 32 (new). The method according to claim 31, wherein the host used in step (iv) of the method is first tolerized to the class of antibody that is selected in step (iii) before said antibody is introduced into said host.

Claim 33 (new). A method of manufacture of an anti-paratopic antibody comprising the steps of:

(i) selecting from a pool of antibodies prepared from a plurality of humans, a prototypic set wherein members of the prototypic set are antibodies which bind HIV;

(ii) subdividing the prototypic set selected in step (i) into antibody classes IgG, IgA, IgM, IgD and IgE;

(iii) screening the antibody classes from step (ii) to select one or more classes which bind at least one of the HIV proteins selected from gp120, gp41, p24, p18, p55 and gp160;

(iv) incubating the antibody selected in step (iii) with spleen cells derived from either human spleens or from spleens of another vertebrate system for sufficient time to allow the spleen cells to respond to the antibodies;

(v) preparing from the spleen cell population prepared in step (iv) hybridoma cell lines; and

(vi) selecting, isolating and purifying anti-paratopic antibodies produced by the hybrids generated in step (v), which bind antibodies that bind HIV.

Claim 34 (new). The method according to claim 31 wherein antibodies from the antibody classes selected in step (iii) are enzymatically cleaved to separate F© and F(ab) antibody fragments and the F(ab) antibody fragments are used in place of the antibody in step (iv).

Claim 35 (new). The method according to claim 33 wherein the antibodies produced are monoclonal antibodies.

Claim 36 (new). The method according to claim 31 wherein the antibodies produced are polyclonal antibodies.

Claim 37 (new). The method according to claim 31 wherein the antibody classes of step (ii) are further subdivided into subclasses prior to performing step (iii) and wherein in step (iii) one or more subclasses are selected.

Claim 38 (new). The method according to claim 31 wherein only those antibody classes that bind two or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 39 (new). The method according to claim 31 wherein only those antibody classes that bind three or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 40 (new). The method according to claim 31 wherein only those antibody classes that bind four or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 41 (new). The method according to claim 31 wherein only those antibody classes that bind all of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 42 (new). The method according to claim 37 wherein only those antibody subclasses that bind two or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 43 (new). The method according to claim 37 wherein only those antibody subclasses that bind three or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 44 (new). The method according to claim 37 wherein only those antibody subclasses that bind four or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 45 (new). The method according to claim 37 wherein only those antibody subclasses that bind all of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 46 (new). Purified non-human anti-paratopic antibodies produced according to the method of claim 31.

Claim 47 (new). Purified anti-paratopic antibodies produced according to the method of claim 33.

Claim 48 (new). The method according to claim 33 wherein antibodies from the antibody classes selected in step (iii) are enzymatically cleaved to separate F© and F(ab) antibody fragments and the F(ab) antibody fragments are used in place of the antibody in step (iv).

Claim 49 (new). The method according to claim 33 wherein the antibody classes of step (ii) are further subdivided into subclasses prior to performing step (iii) and wherein in step (iii) one or more subclasses are selected.

Claim 50 (new). The method according to claim 33 wherein only those antibody classes that bind two or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 51 (new). The method according to claim 33 wherein only those antibody classes that bind three or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 52 (new). The method according to claim 33 wherein only those antibody classes that bind four or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 53 (new). The method according to claim 33 wherein only those antibody classes that bind all of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 54 (new). The method according to claim 49 wherein only those antibody subclasses that bind two or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 55 (new). The method according to claim 49 wherein only those antibody subclasses that bind three or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 56 (new). The method according to claim 49 wherein only those antibody subclasses that bind four or more of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.

Claim 57 (new). The method according to claim 49 wherein only those antibody subclasses that bind all of the proteins gp120, gp41, p24, p18, p55 or gp160 are selected for use in step (iv) of the method.